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OPEN MEETING

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MEMORANDUM

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Arizona Corporation Commission
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2007 SEP -5 P 4: 43

AZ CORP COMMISSION
DOCKET CONTROL

TO: THE COMMISSION

FROM: Utilities Division

DATE: September 5, 2007

RE: SOUTHWEST GAS CORPORATION – APPLICATION FOR APPROVAL OF ITS MULTI-FAMILY NEW CONSTRUCTION PROGRAM (A DEMAND SIDE MANAGEMENT PROGRAM) (DOCKET NO. G-01551A-04-0876)

On June 26, 2006, Southwest Gas Corporation ("Southwest") filed an application for approval of its Multi-Family New Construction ("Multi-Family") program, as required by Decision No. 68487. Decision No. 68487 required that the Company file detailed descriptions of its DSM programs within 120 days of the Commission's February 23, 2006 Order approving rate changes effective March 1, 2006.

The proposed program would be newly-implemented and would provide incentives to builders of multi-family apartments to follow ENERGY STAR® guidelines. The Multi-Family New Construction ("Multi-Family") program is one of seven demand-side management ("DSM") programs included in Southwest's 2006 Arizona Demand Side Management Program Plan.

Program Description

The program is designed to raise energy efficiency standards for the construction of apartment buildings and to improve awareness of high efficiency measures among apartment builders and renters. Financial incentives are proposed for the following energy-efficiency measures: sealed ductwork, programmable thermostats, compact fluorescent lights and high-efficiency water heaters. These above incentives would be paid to builders of apartment complexes in the Phoenix and Tucson areas.

Staff is recommending against approval of this program because it would require gas utility customers to fund a DSM program offering only electric savings, and because it would result in a large net increase in natural gas usage. There are, in addition, fuel switching issues with respect to using DSM dollars to install natural gas measures in a market usually dominated by electric use.

Delivery, Marketing and Communication

The target market of this program would be multi-family apartment builders in the greater Phoenix and Tucson areas. The target market includes builders in these areas who serve seniors and low-income customers. Marketing and communication would be carried out through:

- one-on-one contacts between builders and Southwest staff members, particularly Southwest's Service Planning Department;
- a brochure and banners promoting the program;
- advertisements in the *Arizona Republic* and *Apartment.com*;
- Southwest website information and through a toll-free Energy Services Department hotline (for both consumers and builders);
- Southwest's work with the Arizona Department of Commerce Energy Office, to promote the program with Low-Income Housing Tax Credit program participants.

The program would also attempt to create awareness among renters of the benefits of more energy-efficient apartments; this awareness would be promoted through leasing agents, who would receive education under the program, and who would provide renters with a flyer concerning the program.

Incentives

There are two incentive levels available under the program. One level reflects incentives available to the 10 percent of the Arizona apartment market usually equipped with natural gas[1] while the other level of incentives is for the 90 percent of the Arizona apartment market that would usually feature all-electric units. The two levels of incentives reflect the differing costs of including gas water heaters.

10% Multi-Family Market (with natural gas)

Measure	Incentives
Duct sealing	$150
Programmable Thermostats	$20
Gas Water Heater	$43
CFL(minimum x 2)	$15
Total	$228

[1] Generally, only apartments in luxury projects are equipped with natural gas, in addition to electricity.

90% Multi-Family Market (usually all-electric)

Measure	Incentives
Duct sealing	$150
Programmable Thermostats	$20
Gas Water Heater	$398
CFL(minimum x 2)	$15
Total	$583

Testing and Verification

As part of the implementation process, outside contractors would be hired to verify and test the duct sealing done by participating builders. The outside contractors would also verify the installation of other DSM measures under the auspices of the Multi-Family program.

Monitoring and Evaluation

Southwest proposes to track and measure the program in the following ways: (i) number of program participants, (ii) number of units constructed, (iii) measures installed, (iv) number and results of ducts tests, (v) rebates processed, (vi) energy savings in therms and kWh, (vii) number of communication activities; (viii) website hits; and (ix) consumer and builder inquiries. Southwest may hire an outside contractor to carry out the measurement and evaluation portion of the program.

Southwest indicates that it might also conduct a follow-up survey. (A survey is listed in the proposed budget.) Participants would be asked to evaluate the program and marketing, while non-participating builders would be surveyed to determine their reasons for opting out of the program.

Program Budget

The estimated total budget for the proposed Multi-Family program is $1.2 million dollars, allocated as shown below. $1.2 million represents approximately 27 percent of the total Southwest DSM budget of $4,385,000. Incentives make up 91.25 percent of the budget, while marketing costs run from 4.7 percent to 4.8 percent and outside contractors (for implementation) would total 3.75 percent. Measurement/Evaluation and Administrative costs under the proposed Multi-Family program would be minimal:

Program Year	**2007**	**2008**	**2009**
Implementation			
Outside contractors	$45,000	$45,000	$45,000
Marketing/Communication			
Newspapers, magazines, Banners and brochures	$56,000	$57,500	$57,500
Incentives			

Incentive amounts	$1,095,000	$1,095,000	$1,095,000
Measurement and Evaluation			
Outside contractors	$1,500	$1,500	$1,500
Survey	$500	$500	$500
Administrative Costs			
Office supplies	$1,000	$500	$500
Travel expenses	$1,000		
TOTAL	$1,200,000	$1,200,000	$1,200,000

Staff recommends that no portion of the Southwest Gas DSM budget be allocated to the proposed Multi-Family project.

Cost-Benefit Analysis

Cost-Effectiveness Ratio

Southwest estimated a cost-effectiveness ratio of 2.17 for its proposed Multi-Family program. Staff modified Southwest's cost-effectiveness to remain consistent with other DSM programs, and to reflect removal of programmable thermostats as a measure.[2] In addition, because data was provided on a separate basis for the two incentive levels available under this program, Staff has calculated two cost-effectiveness ratios. For the 10 percent of apartments that would normally be equipped with gas, Staff calculates a cost-effectiveness ratio of 2.34, while for the 90 percent of apartments that would usually be all-electric, Staff estimates a cost-effectiveness ratio of 0.42.[3] With 90 percent of potential DSM projects well below the level required for cost-effectiveness, the program as a whole can not be considered cost-effective.

Environmental Benefits

Staff has modified Southwest's estimated emissions savings to exclude the savings projected for programmable thermostats. It is Staff's understanding that the increased therm usage resulting from this program was not taken into account by Southwest in calculating the environmental savings. An estimation that included the increased therm usage under this program would have the effect of offsetting the benefits set forth below, although the net benefits would still occur.

[2] Multiple studies have indicated that residential programmable thermostats do not yet result in energy savings, and the Environmental Protection Agency ("EPA") is in the process of removing the Energy Star designation from this measure.

[3] Program with a cost-effectiveness ratio below 1.0 are considered not cost-effective.

Annual Savings	CO_2	NO_x	SO_x	H_2O
2007	5,615,194	1,054	26	1,426,761
2008	5,615,194	1,054	26	1,426,761
2009	5,615,194	1,054	26	1,426,761
Lifetime Savings	274,700,721	51,525	1,288	69,798,548

Staff Analysis

Although apartment amenities, like pools or barbeques, are usually gas-powered, approximately 90 percent of the individual apartment units in Arizona are all-electric. As a result, most of the energy savings available at apartment complexes are also electric. While several measures in the Multi-Family program proposed by Southwest would provide electric savings, none would provide gas savings. In fact, as stated below, net natural gas usage would increase by millions of therms as a consequence of this gas DSM program. Southwest Gas ratepayers, including senior and low-income customers, should not be asked to fund a DSM program that provides no direct savings to gas utility customers. Staff recommends that this program not be approved by the Commission.

Another issue with respect to the Multi-Family program relates to fuel switching. In Appendix D to its program description, Southwest estimated kWh savings of 334,839,966, while estimating *increased* gas usage at 3,859,200 therms. Staff's understanding is that, under this program, Southwest would provide incentives to participating builders to install gas piping[4] and gas water heaters to apartments that would normally have been all-electric. The effect of this program would be to subsidize Southwest's ability to compete in a market normally dominated by electric utilities.

Staff shares Southwest's concern about finding ways to benefit low-income customers. As stated earlier, Southwest has proposed a $1.2 million budget for the Multi-Family program. Staff recommends that Southwest explore the feasibility of shifting this funding to the existing Low-Income Energy Conservation ("LIEC") program. The LIEC program is cost-effective, provides natural gas savings and lowers energy costs for Southwest's low-income customers. Staff recommends that Southwest file a report no later than 60 days from the date of this decision regarding the feasibility of reallocating the proposed Multi-Family program funding to the LIEC program, including with the report a plan for how the funding is to be reallocated. Should Southwest determine that reallocating the funding to the LIEC program would not be feasible, Southwest must provide a plan for allocating the Multi-Family funding to an alternative Southwest DSM program or programs.

[4] The cost of installing piping to apartment building that would normally be all-electric is included as part of the incremental cost of the gas water heater measure.

Reporting Requirements

Staff has recommended that the Multi-Family program not be approved and, for this reason, has not made recommendations regarding the type of program information that should be included in Southwest's semi-annual DSM reports.

Summary of Staff Recommendations

- Staff has recommended that no portion of the Southwest Gas DSM budget be allocated to the proposed Multi-Family program.
- Staff recommends that the Multi-Family program not be approved.
- Staff recommends that Southwest explore the feasibility of shifting the funding proposed for the Multi-Family program to the existing Low-Income Energy Conservation ("LIEC") program.
- Staff recommends that Southwest file a report no later than 60 days from the date of this decision regarding the feasibility of reallocating the proposed Multi-Family program funding to the LIEC program, including with the report a plan for how the funding is to be reallocated. Should Southwest determine that reallocating the funding to the LIEC program would not be feasible, Southwest must provide a plan for allocating the Multi-Family funding to an alternative Southwest DSM program or programs.

for Ernest G. Johnson
Director
Utilities Division

EGJ:JMK:lhm\JMA

ORIGINATOR: Julie McNeely-Kirwan

BEFORE THE ARIZONA CORPORATION COMMISSION

MIKE GLEASON
Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
KRISTIN K. MAYES
Commissioner
GARY PIERCE
Commissioner

IN THE MATTER OF THE APPLICATION OF SOUTHWEST GAS CORPORATION – FILING FOR APPROVAL OF ITS MULTI-FAMILY NEW CONSTRUCTION PROGRAM	DOCKET NO. G-01551A-04-0876 DECISION NO. __________ ORDER

Open Meeting
September 18 and 19, 2007
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Southwest Gas Corporation ("Southwest") is engaged in providing natural gas within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission.

2. On June 26, 2006, Southwest Gas Corporation ("Southwest") filed an application for approval of its Multi-Family New Construction ("Multi-Family") program, as required by Decision No. 68487. Decision No. 68487 required that the Company file detailed descriptions of its DSM programs within 120 days of the Commission's February 23, 2006 Order approving rate changes effective March 1, 2006.

3. The proposed program would be newly-implemented and would provide incentives to builders of multi-family apartments to follow ENERGY STAR® guidelines. The Multi-Family New Construction ("Multi-Family") program is one of seven demand-side management ("DSM") programs included in Southwest's 2006 Arizona Demand Side Management Program Plan.

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4. Program Description

The program is designed to raise energy efficiency standards for the construction of apartment buildings and to improve awareness of high efficiency measures among apartment builders and renters. Financial incentives are proposed for the following energy-efficiency measures: sealed ductwork, programmable thermostats, compact fluorescent lights and high-efficiency water heaters. These above incentives would be paid to builders of apartment complexes in the Phoenix and Tucson areas.

5. Staff has recommended against approval of this program because it would require gas utility customers to fund a DSM program offering only electric savings, and because it would result in a large net increase in natural gas usage. There are, in addition, fuel switching issues with respect to using DSM dollars to install natural gas measures in a market usually dominated by electric use.

6. Delivery, Marketing and Communication

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- Southwest website information and through a toll-free Energy Services Department hotline (for both consumers and builders);
- Southwest's work with the Arizona Department of Commerce Energy Office, to promote the program with Low-Income Housing Tax Credit program participants.

7. The program would also attempt to create awareness among renters of the benefits of more energy-efficient apartments; this awareness would be promoted through leasing agents, who would receive education under the program, and who would provide renters with a flyer concerning the program.

8. Incentives

There are two incentive levels available under the program. One level reflects incentives available to the 10 percent of the Arizona apartment market usually equipped with natural gas[1] while the other level of incentives is for the 90 percent of the Arizona apartment market that would usually feature all-electric units. The two levels of incentives reflect the differing costs of including gas water heaters.

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Southwest proposes to track and measure the program in the following ways: (i) number of program participants, (ii) number of units constructed, (iii) measures installed, (iv) number and results of ducts tests, (v) rebates processed, (vi) energy savings in therms and kWh, (vii) number of communication activities; (viii) website hits; and (ix) consumer and builder

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inquiries. Southwest may hire an outside contractor to carry out the measurement and evaluation portion of the program.

11. Southwest indicates that it might also conduct a follow-up survey. (A survey is listed in the proposed budget.) Participants would be asked to evaluate the program and marketing, while non-participating builders would be surveyed to determine their reasons for opting out of the program.

12. Program Budget

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Office supplies	$1,000	$500	$500
Travel expenses	$1,000		
TOTAL	$1,200,000	$1,200,000	$1,200,000

13. Staff has recommended that no portion of the Southwest Gas DSM budget be allocated to the proposed Multi-Family project.

14. Cost-Benefit Analysis

Cost-Effectiveness Ratio

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programs, and to reflect removal of programmable thermostats as a measure.[2] In addition, because data was provided on a separate basis for the two incentive levels available under this program, Staff has calculated two cost-effectiveness ratios. For the 10 percent of apartments that would normally be equipped with gas, Staff calculates a cost-effectiveness ratio of 2.34, while for the 90 percent of apartments that would usually be all-electric, Staff estimates a cost-effectiveness ratio of 0.42.[3] With 90 percent of potential DSM projects well below the level required for cost-effectiveness, the program as a whole can not be considered cost-effective.

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2009	5,615,194	1,054	26	1,426,761
Lifetime Savings	274,700,721	51,525	1,288	69,798,548

16. <u>Staff Analysis</u>

Although apartment amenities, like pools or barbeques, are usually gas-powered, approximately 90 percent of the individual apartment units in Arizona are all-electric. As a result, most of the energy savings available at apartment complexes are also electric. While several measures in the Multi-Family program proposed by Southwest would provide electric savings, none would provide gas savings. In fact, as stated below, net natural gas usage would increase by millions of therms as a consequence of this gas DSM program. Southwest Gas ratepayers,

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including senior and low-income customers, should not be asked to fund a DSM program that provides no direct savings to gas utility customers. Staff has recommended that this program not be approved by the Commission.

17. Another issue with respect to the Multi-Family program relates to fuel switching. In Appendix D to its program description, Southwest estimated kWh savings of 334,839,966, while estimating increased gas usage at 3,859,200 therms. Staff's understanding is that, under this program, Southwest would provide incentives to participating builders to install gas piping[4] and gas water heaters to apartments that would normally have been all-electric. The effect of this program would be to subsidize Southwest's ability to compete in a market normally dominated by electric utilities.

18. Staff shares Southwest's concern about finding ways to benefit low-income customers. As stated earlier, Southwest has proposed a $1.2 million budget for the Multi-Family program. Staff has recommended that Southwest explore the feasibility of shifting this funding to the existing Low-Income Energy Conservation ("LIEC") program. The LIEC program is cost-effective, provides natural gas savings and lowers energy costs for Southwest's low-income customers. Staff has recommended that Southwest file a report no later than 60 days from the date of this decision regarding the feasibility of reallocating the proposed Multi-Family program funding to the LIEC program, including with the report a plan for how the funding is to be reallocated. Should Southwest determine that reallocating the funding to the LIEC program would not be feasible, Southwest must provide a plan for allocating the Multi-Family funding to an alternative Southwest DSM program or programs.

19. <u>Reporting Requirements</u>

Staff has recommended that the Multi-Family program not be approved and, for this reason, has not made recommendations regarding the type of program information that should be included in Southwest's semi-annual DSM reports.

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[4] The cost of installing piping to apartment building that would normally be all-electric is included as part of the incremental cost of the gas water heater measure.

20. Summary of Staff Recommendations

Staff has recommended that no portion of the Southwest Gas DSM budget be allocated to the proposed Multi-Family project.

Staff has recommended that the Multi-Family program not be approved.

Staff has recommended that Southwest explore the feasibility of shifting the funding proposed for the Multi-Family program to the existing Low-Income Energy Conservation ("LIEC") program.

Staff has recommended that Southwest file a report no later than 60 days from the date of this decision regarding the feasibility of reallocating the proposed Multi-Family program funding to the LIEC program, including with the report a plan for how the funding is to be reallocated. Should Southwest determine that reallocating the funding to the LIEC program would not be feasible, Southwest must provide a plan for allocating the Multi-Family funding to an alternative Southwest DSM program or programs.

CONCLUSIONS OF LAW

1. Southwest is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Southwest and over the subject matter of the application.

3. The Commission, having reviewed the application and Staff's Memorandum dated September 5, 2007, concludes that it is not in the public interest to approve the Multi-Family New Construction program.

ORDER

IT IS THEREFORE ORDERED that the Multi-Family New Construction program not be and hereby is not approved.

IT IS FURTHER ORDERED that no portion of the Southwest Gas DSM budget be allocated to the proposed Multi-Family project.

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IT IS FURTHER ORDERED that Southwest explore the feasibility of shifting the funding proposed for the Multi-Family program to the existing Low-Income Energy Conservation ("LIEC") program.

IT IS FURTHER ORDERED that Southwest docket no later than 60 days from the date of this decision, as a compliance item in this matter, a report regarding the feasibility of reallocating the proposed Multi-Family program funding to the LIEC program, including with the report a plan for how the funding is to be reallocated. Should Southwest determine that reallocating the funding to the LIEC program would not be feasible, Southwest must provide a plan for allocating the Multi-Family funding to an alternative Southwest DSM program or programs.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I DEAN S. MILLER, Interim Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this _______day of ____________________, 2007.

DEAN S. MILLER
Interim Executive Director

DISSENT: ___________________________

DISSENT: ___________________________

EGJ:JMK:lhm\JMA

SERVICE LIST FOR: Southwest Gas Corporation
DOCKET NO. G-01551A-04-0876

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